

 **MARINE**  
PLATFORMS



TRITON XLR 11



# TRITON XLX 125HP

<b>POWER</b>	125 shaft horsepower
<b>DEPTH RATING</b>	3000 msw (9842 fsw)
<b>DIMENSIONS</b>	
Length	2.6m
Width	1.68 m
Height	2 m
<b>WEIGHT</b>	
In-Air	3736 kg
Payload in Seawater	150 kg
<b>SPEED (CALCULATED)</b>	
Forward	3.9 knots
Lateral	3.4 knots
Vertical	3.7 knot
Turning Rate	40° per second
<b>BOLLARD PULL (CALCULATED)</b>	
Forward	975 kgf
Lateral	975 kgf
Vertical	975 kgf
<b>THRUSTERS</b>	
Type	Hydraulic, fixed pitch, screens optional
RPM	2,000 (maximum)
Axial	4 x 380 mm (canted @ 45°)
Vertical	3 x 380 mm (canted @ 15°)
<b>LIFT POINT</b>	
Safe Working Load (SWL)	7,000 kg 15,430 lb

<b>FRAME</b>	
Material	Aluminum 6082T6 with SST Hardware
Thru-Frame Lift	3000 kg 6614 lb
Auxiliary Lift	4 x padeyes provided with lift sling assembly
Work Package Mountings	<ul style="list-style-type: none"> <li>4 x 35 mm Ø horizontal pin and socket</li> <li>Aft mounts also available</li> </ul>
<b>BUOYANCY</b>	
Type	Syntactic Foam
Arrangement	3 main blocks, secured with spring washers
<b>SUBSEA HPU MOTOR</b>	
Type	4-Pole Induction
RPM	1800
Voltage	3-phase, 3000 VAC, 60 Hz
Configuration	Dual ended
Instrumentation	Ground fault, temperature, leak detect
<b>HYDRAULICS</b>	
<b>Main Pump</b>	Variable displacement, open circuit, load sensed 147 cc
Factory Set System Pressure	240 bar 3,500 psi
Maximum System Flow (open loop)	207 lpm

<b>Auxiliary Pump (if fitted)</b>	Variable displacement, open circuit, load sensed 45 cc
Factory Set System Pressure	210 bar 3,060 psi
Flow	70 lpm 19 gpm
Manifolds	External metering, cross-port relief, on all valve stations
Main	12 x NG3
Thruster (total housed in 2 manifolds)	<ul style="list-style-type: none"> <li>16 x M33 cartridge</li> <li>2 x NG3</li> </ul>
Auxiliary (if fitted)	12 x NG3 (user configurable)
NG6 Auxiliary (if fitted)	2 x NG6 Pressure and Bidirectional Flow (user configurable)
Hi Flow Auxiliary (if fitted)	2 x High Flow P/O Cartridge Check Valve
<b>Instrumentation</b>	<ul style="list-style-type: none"> <li>Main and auxiliary pressure (mechanical and electrical gauges)</li> <li>Filter pressure differential (Thruster Case Drain)</li> <li>Reservoir levels (analogue)</li> <li>Water detectors in all manifolds</li> <li>Valve position and power indicators (visual onboard and on GUI)</li> </ul>

<b>Reservoirs</b>	
Main System	20 L (5.2 US gal/1,200 in3) including 6.6 L(1.7 US gal/400 in3) compensation
Auxiliary System (if fitted)	7L (1.8 US gal/427 in3) including 3.3 L(0.85 US gal/200 in3) compensation

<b>Fill Volumes</b>	
Main System	50 L (13 US gal), 15 psi compensation
Auxiliary System	25 L (7 US gal), 5 psi compensation

<b>Filtering</b>	
Pressure	3 Micron Absolute, No Bypass
Return	5 Micron Absolute, 50 psi bypass
Case Drain	10 Micron Absolute, 15 psi bypass
Water Separation	CARDEV specifications

<b>Oil</b>	ISO rated, Shell Tellus (viscosity specified based on area of operation)
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<b>Tubing</b>	Stainless steel seamless tubing
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<b>Fittings</b>	Stainless steel Parker Seal-Lok & SAE Ports
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<b>POWER REQUIREMENTS</b>	
Power Input	250kVA Nominal – (Refer to the Surface Power Section for generator sizing details)
Voltage	440/690 V, 3-Phase, 60Hz

<b>ELECTRICAL &amp; TELEMETRY</b>	
	Leak sensors in all boxes and vessels
Junction Boxes	Core Termination
Pressure Vessel	1 x Control Can (Anodized Aluminum)
Protocol	ICEnet™ Distributed Network Control
Communications	CWDM Multiplexers on 1 Single Mode Fiber – 6 Spare CWDM Channels
Core Junction Box	Core JB to include 4 SD video and 2 HD video Channels
Survey Junction Box	PSS Standard
DC Power	<ul style="list-style-type: none"> <li>• Inside dry housing (Control Can)</li> <li>• 5V, ±15V @ 85W for Can Equipment, 24V @ 100W for ICE Boards</li> <li>• 24V @ 300W Cameras, 24 V @ 300 W, 24 V @ 300 W (optional)</li> <li>• 48 V @ 300 W</li> </ul>
AC Power	<ul style="list-style-type: none"> <li>• 120 V @ 3.5 kW for DC supplies above, AC Instruments and lights</li> </ul>
C Power (Manifolds)	<ul style="list-style-type: none"> <li>• 28V unsmoothed @ 750W</li> </ul>

<b>COMPENSATION – ELECTRICAL</b>	
Relief Pressure	10 psi – 15 psi
Oil	Shell Tellus (same viscosity as hydraulic fluid)
Capacity	90 L (23 gallons)
Junction Boxes	<ul style="list-style-type: none"> <li>• Core termination</li> <li>• Auxiliary</li> </ul>

Manifolds	<ul style="list-style-type: none"> <li>• Thruster x 2</li> <li>• Main</li> <li>• Auxiliary</li> <li>• NG 6</li> </ul>
Instrumentation	<ul style="list-style-type: none"> <li>• Analog level sensors, 4 – 20 mA</li> <li>• Water Detect</li> </ul>
PERIPHERAL EQUIPMENT	User Configurable
Lights	<ul style="list-style-type: none"> <li>• 6 x 250 W (+2 optional) or 9 x LED (+3 optional)</li> <li>• 120 VAC, dimmable</li> <li>• Controlled in pairs, 3 x breakers protect 3 lights each</li> </ul>
Cameras	<ul style="list-style-type: none"> <li>• 4 x NTSC or PAL, (+4 optional)</li> </ul>
Pan & Tilts	<ul style="list-style-type: none"> <li>• 1 (+1 optional) Hydraulic</li> <li>• Proportional speed control</li> <li>• Max Torque: 100 Nm/75 ft-lbs</li> </ul>
Depth	<ul style="list-style-type: none"> <li>• ± 0.1% FS Quartz Resonator</li> </ul>
Imaging Sonar	330/675 kHz, 100 m range or optional customer specified sonar
Optional Emergency RDF Beacon	Channel C 160.275 kHz pressure deactivated
Optional Emergency Flasher	Pressure de-activated strobe
Optional DVL	As specified by customer

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**AUTO CONTROLS**

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Heading	$\pm 2^\circ$
Depth	$\pm 0.1$ m
Altitude	$\pm 0.1$ m
Pitch and Roll	$\pm 5^\circ$
Heading Park	Maintains heading relative to manipulator
Failsafe	Maintains depth during emergency loss of telemetry

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**ENVIRONMENTAL CONDITIONS**

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Air Temperature	-20 to 45°C
Water Temperature	4 to 32°C
Storage Temperature	-20 to 60°C
Humidity	Up to 100%
Saltwater	Designed for intermittent submersion
Vibration	0.5g Peak, sine-sweep 5 Hz to 55 Hz

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**LOAD FRAME DESIGN SPECIFICATIONS**

Load Frame: TMS frame, vehicle frame, work package mount

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Det Norske Veritas	Rules for Certification of Lifting Appliances
Lloyds Register of Shipping	Lifting Appliances in a Marine Environment
American Bureau of Shipping (ABS)	DNV approved

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